WHAT IS CLAIMED IS:

1.   A handover method in an mobile communication system that includes a mobile node (MN) having a mobile IP (Internet Protocol) address, a
5 first foreign agent (FA) for wirelessly communicating with the MN in the area where the MN is located, a home agent (HA) for registering the location of the MN, a router connected to the HA, and a corresponding node (CN) connected to the router for communicating with the MN for performing IP tunneling with the first FA, the router transmitting IP tunneling information to the first FA through
10 the HA, the method comprising the steps of:

transmitting a Binding Update message including the IP address of a second FA and an acknowledgement request to the first FA by the second FA, when a handover occurs as the MN moves from the area of the first FA to the area of the second FA adjacent to the first FA; and
15   transmitting a Binding Acknowledge message including a information of the IP tunneling capability of the router to the second FA in response to the Binding Update message by the first FA.

2.   The handover method of claim 1, further comprising the step of
20 registering the location information of the MN to the second FA wirelessly communicating with the MN during the handover.

3.   The handover method of claim 1, further comprising the step of transmitting a Binding Warning message to the HA by the first FA during the
25 handover.

4.   The handover method of claim 1, further comprising the step of updating the location information of the MN by transmitting a Registration Request message to the HA by the second FA after receiving the Binding
30 Acknowledge message.

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5.   The handover method of claim 4, further comprising the step of transmitting the Binding Update message to the router by the HA to notify the router of movement of the MN when the location information of the MN is
5 updated.

6.   A handover method for a mobile node (MN) having a mobile IP address in a source foreign agent (FA) of a mobile communication system, comprising the steps of:
10   transmitting a Binding Warning message to a home agent (HA) if the MN moves to the target FA with a data tranmission/reception path established in the area of the source FA; and
transmitting a Binding Acknowledge message to the target FA including an IP tunneling status value upon receipt of a Binding Update message from the
15 target FA, and releasing an established IP tunnel between the source FA and a core network(CN).

7.   The handover method of claim 6, wherein the Binding Acknowledge message comprises type information (Type), a field R indicating
20 the capsulation capability of a router connected to the CN to which the MN connects a call, a status field (Status), the home address of the MN (Mobile Node Home Address), and ID.

8.   A handover method for an MN having a mobile IP address in a
25 target FA of a mobile communication system, comprising the steps of:
transmitting a Binding Update message to a source FA upon receipt of a Registration Request message from the MN requiring a handover;
transmitting the Registration Request message to an HA for the MN upon receipt of a Binding Acknowledge message from the source FA; and
30   establishing a radio channel between the MN and the target FA and

exchanging data on a radio channel.

9. The handover method of claim 8, wherein the Binding Update message comprises type information (Type), a field indicating the time period for which the MN is registered (Life time), Mobile Node Home Address, the address of the target FA (Care-of Address), ID, and an acknowledgement requesting message field A.